

**ABSTRACT**

The present invention relates to novel monoclonal antibodies that specifically bind to the phospholipid phosphatidyl serine and methods for treating a neoplastic disorder. Further, the phosphatidyl serine specific monoclonal antibodies of the invention can be used to determine the presence of tumors and/or cancer cells and for molecular targeting of chemotherapeutic drugs, toxins or radionuclides to tumors and/or cancer cells. Also, kits for detecting phosphatidyl serine specific tumors or cancer cells are provided.